(d) The contracting officer's determination that an option offers no subcontracting opportunities must be explained either on GSA Form 3584 or as an attachment thereto, before it is forwarded to the SBTA and the SBA/PCR for review.

(e)(1) Before determining the responsibility of an offeror on a contract requiring a subcontracting plan, the contracting officer shall review the offeror's compliance with previous subcontracting plans, if any, approved by the GSA contracting activity, including the contractor's performance in submitting subcontracting reports in a timely manner. The findings must be documented on the GSA Form 3584, Checklist for Review of Subcontracting Plan, in the "Remarks" block or on an attachment to the GSA Form 3584 before forwarding it to the SBTA and the SBA/PCR for review.

(2) In addition to (e)(1) of this section, PBS contracting officers must check the quarterly list of PBS contracts with plans provided by AU and contact all other GSA contracting activities holding contracts with the same contractor concerning compliance with the previous year's plan.

(3) When an offeror has consistently failed to submit SF 294 and SF 295 reports in a timely manner or has failed to make a good faith effort to meet its subcontracting goals on previous contracts with plans, the contracting officer shall include on the GSA Form 3584 in the "Remarks" block or in an attachment to the GSA Form 3584 the basis for finding the offeror responsible including the steps the offeror proposes to take that were not included in previous subcontracting plans to ensure compliance with the subcontracting program requirements on the proposed contract.

3. Section 519.706–70 is amended by revising paragraph (e) to read as follows:

519.706–70 Monitoring contractor compliance with subcontracting plans.

* * * * *

(e) Before determining that a contractor's failure to achieve the subcontracting goals was occasioned by bad faith, the contracting officer shall analyze the explanations required by paragraph (b) above or provided pursuant to FAR 19.706.

* * * * *

Dated: May 23, 1991.

Richard H. Hopf, III,

Associate Administrator for Acquisition Policy.

[FR Doc. 91–13740 Filed 6–11–91; 8:45 am]

BILLING CODE 6820–61–M

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Part 195

[Docket No. PS–112, Amendment 195–45]

RIN 2137– AB72

Transportation of Carbon Dioxide by Pipeline

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final rule.

SUMMARY: This final rule establishes new safety regulations governing the transportation by pipeline of carbon dioxide in a supercritical state. The regulations for carbon dioxide are similar to the regulations for hazardous liquids. Section. 211 of the Pipeline Safety Reauthorization Act of 1988 (Pub. L. 100–561) requires that the DOT regulate carbon dioxide which is transported by pipeline facilities.

EFFECTIVE DATE: The effective date of this final rule is July 12, 1991.

FOR FURTHER INFORMATION CONTACT: Cesar De Leon (202) 366–1640, regarding the contents of this final rule; or the Dockets Unit (202) 366–5046, regarding copies of this final rule or other information in the docket.

SUPPLEMENTARY INFORMATION:

Background

Federal regulations in 49 CFR part 195 prescribe safety standards and reporting requirements for pipeline facilities used in the transportation of hazardous liquids, which are defined to include petroleum, petroleum products, or anhydrous ammonia. Section 211 of the Pipeline Safety Reauthorization Act of 1988 (Pub. L. 100–561) enacted on October 31, 1988 (49 U.S.C. 2015) requires that the Department of Transportation regulate carbon dioxide (CO_2) which is transported by pipeline facilities. On March 16, 1989, the American Petroleum Institute (API) petitioned the Department to amend part 195 to include the regulation of pipelines that transport CO_2. The recommendations contained in the petition are the product of a task force consisting of representatives of nine companies that own or operate CO_2 pipelines. The API recommended that OPS amend existing part 195 rather than write a new part for CO_2 pipelines only, and RSPA adopted this approach. On October 12, 1989, the RSPA published a notice of proposed rulemaking (NPRM) (54 FR 41912) proposing to amend these regulations to also apply to the transportation of CO_2 in the supercritical phase.

The NPRM described the physical properties of CO_2. At normal temperatures and atmospheric pressure, CO_2 is an odorless and colorless gas, not flammable, with a density 1.5 times the density of air. It will not support combustion nor will it sustain life if inhaled. Carbon dioxide may exist simultaneously as a gas, liquid, and solid at its triple point which is −69°F and 60.43 psig. Below the triple point, it may be either a solid or gas depending on temperature and pressure. Dry ice for refrigeration is a common use of CO_2 in solid form. Dry ice at a temperature of −109°F and atmospheric pressure will sublime, that is, pass to the gas phase without going through the liquid state. The critical temperature of CO_2 is 87.8°F. When pressure reaches 1200 psig, CO_2 enters what is called the supercritical phase (also referred to as a dense vapor phase).

Pipeline transportation of CO_2 in the supercritical phase is more desirable than transportation in the gaseous phase. As a dense vapor in the supercritical state, CO_2 can be transported more economically and efficiently using smaller pipelines and pumps because greater volumes of fluid can be transported as a dense vapor than as a gas. In addition, CO_2 would be difficult to transport as a gas because it would enter into two-phase flow at a lower pressure than that required for the efficient pipeline transportation of the CO_2.

Carbon dioxide has been used for many years to aid in the production of crude oil. Because of its high degree of solubility in crude oil and abundance from natural sources, CO_2 became a natural candidate for use in enhanced oil recovery (EOR) projects. Under favorable conditions of pressure, temperature, and composition, the CO_2 mixes with the crude oil. The CO_2 that dissolves in the crude oil increases the volume and decreases the viscosity making the oil more mobile. It also exerts an acidic effect on some types of reservoir rocks and vaporizes some of the oil.

There are a number of sources of CO_2. It can be produced commercially in natural gas plants, ammonia plants, and recovered from power plant stack gas. A better source is from underground reservoirs where CO_2 under pressure occurs naturally.

There are various modes of transportation for CO_2, but for the large volumes required in EOR projects, pipeline transportation is the most reliable and economical. Generally

these pipelines originate in the reservoirs of the four corners area and terminate in the Permian Basin oil field in Texas where most of the EOR projects exist. An exception is the Choctow Pipeline which originates near Jackson, Mississippi, and terminates near McComb, Mississippi. A list of CO_2 pipelines was included in the NPRM.

Pipeline Safety Reauthorization Act of 1988

There have been Congressional concerns regarding the transportation of CO_2 by pipeline over a number of years. The report on the Pipelines Safety Reauthorization Act of 1988 from the House Committee on Energy and Commerce in the 1987 session of the100th Congress points out that "* * * The Committee has for sometime recommended the safety regulation and inspection of CO_2 pipelines." The Committee further notes that:

* * * The CO_2 pipeline industry has a good safety record and performs an essential service for enhanced oil recovery, but it is a very new industry. It is not a question of its safety record that caused the requirement for safety regulation, but rather the unique potential for disaster if there were ever a break in a CO_2 pipeline * * *.

* * * A recent event demonstrated just how lethal CO_2 can be. On August 21, 1986, a catastrophic release of gas dissolved in Lake Nyos in Cameroon, Africa, killed 1,700 people. At the time, the news media characterized the gas as 'toxic,' 'poisonous' and 'lethal.' Subsequent investigation proved the gas was carbon dioxide.

* * * The Committee believes that since CO_2 is deadly, CO_2 pipelines should have appropriate Federal safety regulations. (H.R. Rep. No. 100-445; 100th Congress; 1st Session (1987).]

Consequently, the requirement to issue regulations for the pipeline transportation of carbon dioxide was included in section 211 of title II of the Pipeline Safety Reauthorization Act of 1988, 49 U.S.C. 2015.

Comments to the NPRM

Five commenters responded to the notice: The Railroad Commission of Texas, Exxon Company, U.S.A., American Petroleum Institute (API), the U.S. Department of the Interior (DOI), and the Public Utility Commission of Oregon. In addition, the NPRM was presented in draft to the Technical Hazardous Liquid Pipeline Safety Standards Committee (THLPSSC) in Washington, DC, on September 14, 1989. The THLPSSC voted unanimously that the draft proposed rules were technically feasible, reasonable, and practicable. A transcript and report of the THLPSSC meeting are in the docket.

Exxon stated that the list of existing CO_2 pipelines is incomplete in that it does not include Amoco's 20-mile pipeline from Bairoil to the Lost Soldier and Wertz fields. Exxon further stated that the La Barge, Wyoming, area is a major CO_2 supply source for Wyoming and has the potential to supply EOR projects as far north as the Williston Basin (North Dakota) and Canada. The RSPA appreciates this additional data and has made these corrections to its records.

The Public Utility Commission of Oregon commented that although Oregon has no CO_2 pipelines at the present, it supported the adoption of the proposed rules for CO_2 pipelines because it believed that pipelines operating at pressures in excess of 1200 psig present a potential public hazard.

The Railroad Commission of Texas commented on the proposal under § 195.1(b)(8) to exclude CO_2 distribution lines in oil production fields. The Railroad Commission disagreed with RSPA's assumption that the CO_2 facilities exempted under § 195.1(b)(8) are typically located in rural areas. Also, the Railroad Commission stated that in Texas, many of these lines operate up to 1400 psig, and they should be covered by the regulations when in populated areas.

RSPA did not propose to regulate CO_2 distribution facilities in oil production operations because those lines were thought to be so closely involved in production as to be production facilities which are generally considered as outside of the scope of the transportation of hazardous liquids. However, a closer scrutiny of the issue shows that CO_2 distribution lines should be regulated. Although CO_2 is used in the production of hazardous liquids, it is not itself produced at those sites. Thus CO_2 lines are not "production facilities" within the meaning of the Hazardous Liquid Pipeline Safety Act. Furthermore, RSPA agrees with the Railroad Commission that those lines are sometimes in populated areas and are operating at high pressures. Therefore, the definition has been revised to more narrowly limit the exception to transportation of CO_2 "downstream from a point in the vicinity of the well site at which carbon dioxide is delivered to a production facility," rather than a "production field distribution system." A production field distribution system is not currently defined in the regulations. The Manual of Oil and Gas Terms, Williams and Myers 7th Edition (1987), defines the term "field" very broadly to include a general area underlain by one or more pools of oil and gas. The Manual further states that the term has a meaning which is usually determined from the context in which it is used. It may refer to a certain geographical area from which oil is produced, or it may be restricted to a particular reservoir. Such a broad definition would result in many CO_2 distribution lines, which could encompass more than a county in Texas, being excepted from the rules. Instead the exception in § 195.1(b)(8) is limited to lines downstream of where carbon dioxide is delivered to a production facility in the vicinity of a well site, rather than excepting all the CO_2 lines in the broad expanses of a production field.

The DOI observed that while they are unaware of the occurrence of large volumes of CO_2 in the Outer Continental Shelf (OCS) that might be developed, it may be timely to include OCS pipelines in the CO_2 rules. RSPA agrees with DOI and, in fact, under § 195.1, the scope of the NPRM covered such offshore lines. Part 195 applies to pipeline facilities on the OCS. Nothing in proposed § 195.1(b) excepted the applicability of part 195 to carbon dioxide pipeline facilities on the OCS; therefore, the final rules apply to any offshore pipeline that carries CO_2 in a supercritical phase downstream from production.

The DOI further commented that the definition that carbon dioxide is "* * * a fluid consisting predominately of carbon dioxide molecules compressed to a supercritical state" is too limiting if the rule is to apply to all pipelines carrying CO_2. RSPA agrees with DOI's observation that the Department has authority under section 211 of the Reauthorization Act to regulate all pipeline transportation of CO_2. However, RSPA has chosen to limit the regulations in part 195 to CO_2 in a supercritical state. At present, for economic reasons, CO_2 is transported by pipeline in a supercritical state, i.e., dense vapor state. In the future, if CO_2 is transported other than as a dense vapor where the part 195 regulations are inappropriate for such transportation, RSPA will issue additional regulations for such transportation.

Exxon was concerned with the definition of "carbon dioxide" in another context. Exxon thought that because "predominant" means more than half and because of the difficulty in determining the super critical point on a mixture of gases, the definition should be changed as follows: "Carbon dioxide" means a fluid consisting of more than 90 percent carbon dioxide molecules, compressed to a supercritical state. The RSPA agrees with Exxon that the definition of "carbon dioxide" needs to be more precise than the proposed

definition in the NPRM. Exxon's definition is more precise and would preclude the problems identified by that company. Therefore, the definition of "carbon dioxide" has been revised to mean a fluid consisting of more than 90 percent carbon dioxide molecules.

The DOI also questioned the requirement in § 195.50(b) that requires an accident report for each failure in a pipeline system when there is a release of CO_2 that results in the loss of 50 or more barrels of CO_2. The DOI points out that carbon dioxide is conventionally measured in its gaseous form in which the unit of measure is thousand standard cubic feet. The DOI further points out that in the event of a pipeline rupture, the CO_2 released would flash to a solid or gaseous phase depending upon controlling conditions and an accurate estimation of the loss in barrels would be very difficult.

The DOI is correct that the throughput of CO_2 in pipelines is most often measured in thousand standard cubic feet. However, as petitioned by API, the loss of carbon dioxide due to a rupture is better reported in barrels because that results in consistent failure reporting criteria with other commodities regulated in part 195 and consistent failure statistics in the RSPA pipeline failure data base. An operator can make the conversion to barrels without difficulty knowing the characteristics of the CO_2 and the pressure and temperature of the CO_2 at the time of the failure. Therefore, RSPA did not adopt this recommendation.

Another DOI comment was that the final rule should exempt pipelines on the OCS from the "line marker" requirements in § 195.410(a) because it would be impractical to mark submerged offshore pipelines. An exemption is not required because section 195.410(b) exempts buried pipelines located offshore or at crossings of or under waterways or other bodies of water from having to place and maintain line markers. This exemption would include CO_2 lines.

Both the API and Exxon were concerned about the proposed change in § 195.102 "Design Temperature." Exxon commented that operating procedures can be implemented which avoid extremely low temperatures during filling and blowdown, making it unnecessary to consider low temperatures in selecting material for CO_2 lines. The API commented that the proposed revision to § 195.102 could be interpreted to mean that all portions of a carbon dioxide system must be made of materials suitable for low temperatures because any portion of a carbon dioxide system could develop a leak and the area around the leak would be subjected to a low temperature because of the rapid reduction of pressure. RSPA intended § 195.102 in the NPRM to apply only to locations of the pipeline that are intended to be subjected to rapid reduction of pressure during normal operation. Therefore, RSPA has revised this section to limit the selection of pipeline materials for low temperatures to apply to components of CO_2 pipelines that are subject to low temperatures during normal operation because of rapid reduction of pressure such as during blow-down, or during the initial fill of the line.

The API commented that they think it is inappropriate to require valves on carbon dioxide pipeline systems at all water crossings greater than 100 feet in width as required by § 195.206. The API argued that carbon dioxide is not polluting and the potential for an asphyxiating cloud from a pipeline at a water crossing would not be any greater for an underwater pipeline than for a buried or aboveground pipeline as asserted by RSPA. The RSPA believes that valves are needed at water crossings greater than 100 feet because of the hazards of a large vapor cloud in case of a large catastrophic failure under a stream. While the release of CO_2 (from a volcanic source) under Lake Nyos in Africa was eight times larger than a release that can be expected from a pipeline rupture, it is significant to note that it resulted in a vapor cloud that caused 1,700 deaths. The characteristics of the release of a large quantity of CO_2 from under a body of water are not yet clearly understood. Therefore, RSPA has retained this requirement in the final rule.

The API also suggested that the definition of "production facility" include "other facilities where CO_2 is produced and prepared for transportation" in addition to facilities used in the process of extracting carbon dioxide from the ground. The RSPA agrees that CO_2 is sometimes obtained from industrial facilities in addition to being produced from the ground and has amended the definition of "production facility" in § 195.2 accordingly.

The API also suggested that the proposed definition of "production facility" include piping or equipment used in gathering of CO_2 thereby excluding the CO_2 gathering lines from these regulations pursuant to the proposed § 195.1(b)(6). The RSPA has not adopted this suggestion because the definition of "production facility" was intended to be limited to production functions and was not intended to include the piping or equipment used in the gathering of carbon dioxide or hazardous liquids. The proposed rules in the NPRM applied to gathering lines used to collect and transport CO_2 from CO_2 production facilities. RSPA was not persuaded by the comments to exclude these gathering lines in the final rule. It should be noted that the definition of "gathering line" is not applicable to carbon dioxide pipelines nor is there an exception for CO_2 gathering lines under § 195.1(b)(4).

Paperwork Reduction Act

The reporting requirements in subpart B and recordkeeping requirements under sections 195.5(c), 195.266, 195.310, 195.402 and 195.404 have been approved by the Office of Management and Budget (OMB) under the Paperwork Reduction Act. The addition of CO_2 pipelines to part 195 results in approximately 2,000 miles, or about one percent of additional pipelines subject to the reporting and recordkeeping requirements in part 195. This will minimally increase current reporting and recordkeeping burdens and, therefore, RSPA has sought no further approval from OMB.

Impact Assessment

These regulations extend the part 195 pipeline safety regulations to pipelines that transport CO_2, which are few in number. Pipelines under construction before the effective date of the final rule are subject only to the accident and safety-related condition reporting and operation and maintenance requirements of these regulations. This final rule is consistent with industry safety practices; the fiscal impact of these rules is minimal. No commenters raised any cost implications. Therefore, this final rule is considered to be non-major under Executive Order 12291, and is not considered significant under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). Since the final rule requires minimal compliance expense, it does not warrant preparation of a Draft Regulatory Evaluation. Also, based on the facts available concerning the impact of this final rule, I certify under section 605 of the Regulatory Flexibility Act that it does not have a significant economic impact on a substantial number of small entities. This action has been analyzed under the criteria of Executive Order 12612 (52 FR 41685) and found not to warrant preparation of a Federalism Assessment.

List of Subjects in 49 CFR Part 195

Carbon dioxide, Pipe, Pipeline safety.

In consideration of the foregoing, RSPA amends 49 CFR part 195 as follows:

PART 195—[AMENDED]

1. The authority citation for part 195 continues to read as follows:

Authority: 49 App. U.S.C. 2001 *et seq.*; 49 CFR 1.53.

2. Section 195.0 is revised to read as follows:

§ 195.0 Scope.

This part prescribes safety standards and reporting requirements for pipeline facilities used in the transportation of hazardous liquids or carbon dioxide.

3. In § 195.1, paragraphs (a) and (b) (5), (6), and (7) are revised, and paragraph (b)(8) is added to read as follows:

§ 195.1 Applicability.

(a) Except as provided in paragraph (b) of this section, this part applies to pipeline facilities and the transportation of hazardous liquids or carbon dioxide associated with those facilities in or affecting interstate or foreign commerce, including pipeline facilities on the Outer Continental Shelf.

(b) * * *

(5) Transportation of a hazardous liquid or carbon dioxide in offshore pipelines which are located upstream from the outlet flange of each facility on the Outer Continental Shelf where hydrocarbons or carbon dioxide are produced or where produced hydrocarbons or carbon dioxide are first separated, dehydrated, or otherwise processed, whichever facility is farther downstream;

(6) Transportation of a hazardous liquid or carbon dioxide through onshore production (including flow lines), refining, or manufacturing facilities, or storage or in plant piping systems associated with such facilities;

(7) Transportation of a hazardous liquid or carbon dioxide by vessel, aircraft, tank truck, tank car, or other vehicle or terminal facilities used exclusively to transfer hazardous liquids or carbon dioxide between such modes of transportation.

(8) Transportation of carbon dioxide downstream from a point in the vicinity of the well site at which carbon dioxide is delivered to a production facility.

4. In § 195.2, a definition of "carbon dioxide" is added in alphabetical order and definitions of the following terms "interstate pipeline", "pipe or line pipe", "pipeline or pipeline system", "pipeline facility", "production facility" are revised to read as follows:

§ 195.2 Definition.

* * * * *

Carbon dioxide means a fluid consisting of more than 90 percent carbon dioxide molecules compressed to a supercritical state.

* * * * *

Interstate pipeline means a pipeline or that part of a pipeline that is used in the transportation of hazardous liquids or carbon dioxide in interstate or foreign commerce.

* * * * *

Pipe or *line pipe* means a tube, usually cylindrical, through which a hazardous liquid or carbon dioxide flows from one point to another.

Pipeline or *pipeline system* means all parts of a pipeline facility through which a hazardous liquid or carbon dioxide moves in transportation, including, but not limited to, line pipe, valves, and other appurtenances connected to line pipe, pumping units, fabricated assemblies associated with pumping units, metering and delivery stations and fabricated assemblies therein, and breakout tanks.

Pipeline facility means new and existing pipe, rights-of-way and any equipment, facility, or building used in the transportation of hazardous liquids or carbon dioxide.

Production facility means piping or equipment used in the production, extraction, recovery, lifting, stabilization, separation or treating of petroleum or carbon dioxide, or associated storage or measurement. (To be a production facility under this definition, piping or equipment must be used in the process of extracting petroleum or carbon dioxide from the ground or from facilities where CO_2 is produced, and preparing it for transportation by pipeline. This includes piping between treatment plants which extract carbon dioxide, and facilities utilized for the injection of carbon dioxide for recovery operations.)

* * * * *

5. Section 195.4 is revised to read as follows:

§ 195.4 Compatibility necessary for transportation of hazardous liquids or carbon dioxide.

No person may transport any hazardous liquid or carbon dioxide unless the hazardous liquid or carbon dioxide is chemically compatible with both the pipeline, including all components, and any other commodity that it may come into contact with while in the pipeline.

6. Section 195.8 is revised to read as follows:

§ 195.8 Transportation of hazardous liquid or carbon dioxide in pipelines constructed with other than steel pipe.

No person may transport any hazardous liquid or carbon dioxide through a pipe that is constructed after October 1, 1970, for hazardous liquids or after July 12, 1991 for carbon dioxide of material other than steel unless the person has notified the Secretary in writing at least 90 days before the transportation is to begin. The notice must state whether carbon dioxide or a hazardous liquid is to be transported and the chemical name, common name, properties and characteristics of the hazardous liquid to be transported and the material used in construction of the pipeline. If the Secretary determines that the transportation of the hazardous liquid or carbon dioxide in the manner proposed would be unduly hazardous, he will, within 90 days after receipt of the notice, order the person that gave the notice, in writing, not to transport the hazardous liquid or carbon dioxide in the proposed manner until further notice.

7. The introductory text and paragraph (b) of § 195.50 is revised to read as follows:

§ 195.50 Reporting accidents.

An accident report is required for each failure in a pipeline system subject to this part in which there is a release of the hazardous liquid or carbon dioxide transported resulting in any of the following:

* * * * *

(b) Loss of 50 or more barrels of hazardous liquid or carbon dioxide.

* * * * *

8. The introductory text of § 195.52(a) is revised to read as follows:

§ 195.52 Telephonic notice of certain accidents.

(a) At the earliest practicable moment following discovery of a release of the hazardous liquid or carbon dioxide transported resulting in an event described in paragraph 195.50, the operator of the system shall give notice, in accordance with paragraph (b) of this section, of any failure that:

* * * * *

9. Section 195.102 is revised to read as follows:

§ 195.102 Design temperature.

(a) Material for components of the system must be chosen for the temperature environment in which the components will be used so that the pipeline will maintain its structural integrity.

(b) Components of carbon dioxide pipelines that are subject to low temperatures during normal operation because of rapid pressure reduction or during the initial fill of the line must be made of materials that are suitable for those low temperatures.

10. A new § 195.111 is added to read as follows:

§ 195.111 Fracture propagation.

A carbon dioxide pipeline system must be designed to mitigate the effects of fracture propagation.

11. Section 195.116(c) is revised to read as follows:

§ 195.116 Valves.

* * * * *

(c) Each part of the valve that will be in contact with the carbon dioxide or hazardous liquid stream must be made of materials that are compatible with carbon dioxide or each hazardous liquid that it is anticipated will flow through the pipeline system.

* * * * *

12. In § 195.306, paragraph (a) is revised and paragraph (c) is added to read as follows:

§ 195.306 Test medium.

(a) Except as provided in paragraphs (b) and (c) of this section, water must be used as the test medium.

* * * * *

(c) Carbon dioxide pipelines may use inert gas or carbon dioxide as the test medium if—

(1) The entire pipeline section under test is outside of cities and other populated areas;

(2) Each building within 300 feet of the test section is unoccupied while the test pressure is equal to or greater than a pressure that produces a hoop stress of 50 percent of specified minimum yield strength;

(3) The maximum hoop stress during the test does not exceed 80 percent of specified minimum yield strength;

(4) Continuous communication is maintained along entire test section; and

(5) The pipe involved is new pipe having a longitudinal joint factor of 1.00.

13. Section 195.401(c) is revised to read as follows:

§ 195.401 General requirements.

* * * * *

(c) Except as provided by § 195.5, no operator may operate any part of any of the following pipelines unless it was designed and constructed as required by this part:

(1) An interstate pipeline, on which construction was begun after March 31, 1970, that transports hazardous liquid.

(2) An interstate offshore gathering line, on which construction was begun after July 31, 1977, that transports hazardous liquid.

(3) An intrastate pipeline, on which construction was begun after October 20, 1985, that transports hazardous liquid.

(4) A pipeline, on which construction was begun after July 11, 1991 that transports carbon dioxide.

14. In § 195.402, paragraphs (c) (7), (9), and (12) and (e) (2), (4), (5), and (7) are revised to read as follows:

§ 195.402 Procedural manual for operations, maintenance, and emergencies.

* * * * *

(c) * * *

(7) Starting up and shutting down any part of the pipeline system in a manner designed to assure operation within the limits prescribed by paragraph 195.406, consider the hazardous liquid or carbon dioxide in transportation, variations in altitude along the pipeline, and pressure monitoring and control devices.

* * * * *

(9) In the case of facilities not equipped to fail safe that are identified under paragraph 195.402(c)(4) or that control receipt and delivery of the hazardous liquid or carbon dioxide, detecting abnormal operating conditions by monitoring pressure, temperature, flow or other appropriate operational data and transmitting this data to an attended location.

* * * * *

(12) Establishing and maintaining liaison with fire, police, and other appropriate public officials to learn the responsibility and resources of each government organization that may respond to a hazardous liquid or carbon dioxide pipeline emergency and acquaint the officials with the operator's ability in responding to a hazardous liquid or carbon dioxide pipeline emergency and means of communication.

* * * * *

(e) * * *

(2) Prompt and effective response to a notice of each type emergency, including fire or explosion occurring near or directly involving a pipeline facility, accidental release of hazardous liquid or carbon dioxide from a pipeline facility, operational failure causing a hazardous condition, and natural disaster affecting pipeline facilities.

* * * * *

(4) Taking necessary action, such as emergency shutdown or pressure reduction, to minimize the volume of hazardous liquid or carbon dioxide that is released from any section of a pipeline system in the event of a failure.

(5) Control of released hazardous liquid or carbon dioxide at an accident scene to minimize the hazards, including possible intentional ignition in the cases of flammable highly volatile liquid.

* * * * *

(7) Notifying fire, police, and other appropriate public officials of hazardous liquid or carbon dioxide pipeline emergencies and coordinating with them preplanned and actual responses during an emergency, including additional precautions necessary for an emergency involving a pipeline system transporting a highly volatile liquid.

* * * * *

15. In § 195.403, paragraphs (a) (2), (3), and (4) are revised to read as follows:

§ 195.403 Training.

(a) * * *

(2) Know the characteristics and hazards of the hazardous liquids or carbon dioxide transported, including, in the case of flammable HVL, flammability of mixtures with air, odorless vapors, and water reactions;

(3) Recognize conditions that are likely to cause emergencies, predict the consequences of facility malfunctions or failures and hazardous liquid or carbon dioxide spills, and to take appropriate corrective action;

(4) Take steps necessary to control any accidental release of hazardous liquid or carbon dioxide and to minimize the potential for fire, explosion, toxicity, or environmental damage;

* * * * *

16. Section 195.410(a)(2) is revised to read as follows:

§ 195.410 Line markers.

(a) * * *

(2) The marker must state at least the following: "Warning" followed by the words "Petroleum (or the name of the hazardous liquid transported) Pipeline" or "Carbon Dioxide Pipeline" (in lettering at least 1 inch high with an approximate stroke of one-quarter inch on a background of sharply contrasting color), the name of the operator and a telephone number (including area code) where the operator can be reached at all times.

* * * * *

17. Section 195.414 is revised to read as follows:

§ 195.414 Cathodic protection.

(a) No operator may operate a hazardous liquid interstate pipeline after March 31, 1973, a hazardous liquid intrastate pipeline after October 19, 1988, or a carbon dioxide pipeline after

July 12, 1993 that has an effective external surface coating material, unless that pipeline is cathodically protected. This paragraph does not apply to breakout tank areas and buried pumping station piping. For the purposes of this subpart, a pipeline does not have an effective external coating, and shall be considered bare, if its cathodic protection current requirements are substantially the same as if it were bare.

(b) Each operator shall electrically inspect each bare hazardous liquid interstate pipeline before April 1, 1975, each bare hazardous liquid intrastate pipeline before October 20, 1990, and each bare carbon dioxide pipeline before July 12, 1994 to determine any areas in which active corrosion is taking place. The operator may not increase its established operating pressure on a section of bare pipeline until the section has been so electrically inspected. In any areas where active corrosion is found, the operator shall provide cathodic protection. Section 195.416 (f) and (g) apply to all corroded pipe that is found.

(c) Each operator shall electrically inspect all breakout tank areas and buried pumping station piping on hazardous liquid interstate pipelines before April 1, 1973, on hazardous liquid intrastate pipelines before October 20, 1988, and on carbon dioxide pipelines before July 12, 1994 as to the need for cathodic protection, and cathodic protection shall be provided where necessary.

18. Section 195.418(a) is revised to read as follows:

§ 195.418 Internal corrosion control.

(a) No operator may transport any hazardous liquid or carbon dioxide that would corrode the pipe or other components of its pipeline system, unless it has investigated the corrosive effect of the hazardous liquid or carbon dioxide on the system and has taken adequate steps to mitigate corrosion.

* * * * *

19. Section 195.440 is revised to read as follows:

§ 195.440 Public education.

Each operator shall establish a continuing educational program to enable the public, appropriate government organizations and persons engaged in excavation-related activities to recognize a hazardous liquid or a carbpn dioxide pipeline emergency and to report it to the operator or the fire, police, or other appropriate public officials. The program must be conducted in English and in other languages commonly understood by a significant number and concentration of non-English speaking population in the operator's operating areas.

Issued in Washington, DC, on June 7, 1991.

Douglas B. Ham,

Deputy Administrator, Research and Special Programs Administration.

[FR Doc. 91-13930 Filed 6-11-91; 8:45 am]

BILLING CODE 4910-60-M

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. 87-04, Notice 7]

RIN 2127-AC 73

Federal Motor Vehicle Safety Standards; Air Brake Systems

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Final rule.

SUMMARY: This rule amends Standard No. 121, Air Brake Systems, to revise the timing requirements for parking brake systems, add new requirements concerning release performance and accumulation of actuation energy for parking brakes, and incorporate an earlier agency interpretation of the standard into the standard. These changes are intended to ensure the practicability and objectivity of the parking brake timing test, and clarify that a diaphragm is not considered a component of a brake chamber housing, as that term is used in Standard No. 121. The rule will make the testing procedure easier to perform and more objective, eliminate confusion about the application of the standard to single diaphragm brake systems, and improve the consistency of the regulatory language.

DATES: This amendment is effective December 9, 1991.

ADDRESSES: Petitions for reconsideration should be submitted to: Administrator, National Highway Traffic Safety Administration 400 Seventh St. SW., Washington, DC 20590. It is requested, but not required, that ten copies be submitted.

FOR FURTHER INFORMATION CONTACT: Mr. Scott Shadle, Office of Vehicle Safety Standards, National Highway Traffic Safety Administration, 400 Seventh Street, SW. Washington, DC (202-366-5273).

SUPPLEMENTARY INFORMATION:

I. Background

A. March 1988 Final Rule

In a final rule published in the **Federal Register** (53 FR 7931) on March 11, 1988, NHTSA amended Standard No. 121, Air Brake Systems, to clarify the standard's parking brake requirements, particularly as they relate to air-applied, mechanically held parking brake systems. The amendments required actuation of a mechanical means for parking brake application at the requisite level of retardation within three seconds after operation of the parking brake control. (For trailers, such actuation was required within three seconds after venting to the atmosphere of the front supply line connection is initiated.) In addition, vehicles were required to be capable of meeting requirements related to parking brake retardation force within the three second period. The amendments also required that the grade holding test (or alternative drawbar test) be met with only the mechanical means for parking brake application in operation.

The primary rationale for the parking brake timing requirements is NHTSA's belief that a vehicle's parking brake system should generate retardation force in as short a time as is practicable, since the parking brake system is sometimes used as an emergency braking system. The approach of the March 1988 final rule was to require that vehicles be capable of meeting parking brake retardation force requirements, specified in terms of a grade holding or draw bar test, within a specified time. For trucks and buses, the amendments required minimum parking retardation force requirements to be met at all times after three seconds from the time of actuation of the parking brake control. For trailers, the amendments required minimum parking retardation force requirements to be met at all times after three seconds from the time that venting to the atmosphere of the front supply line connection is initiated.

In responding to commenter concerns that it is not possible to safely conduct the grade holding or draw bar tests within three seconds, NHTSA stated in the March 1988 final rule that it did not believe that manufacturers must, as a practical matter, determine their compliance with the timing requirement during their grade holding or draw bar testing. The agency stated that, instead, certification could be accomplished by using an engineering analysis of the vehicle's parking brake system or, if necessary, a test measuring the air pressure in the parking brake system to determine when the pressure reaches zero. The assumption underlying this statement is that if a vehicle could comply with the grade holding or draw bar test with zero air pressure in the brake chambers, and if the air pressure